



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/648,305	08/27/2003	Klaus Junker	1415 US	3682

20346 7590 04/10/2006
KEY SAFETY SYSTEMS, INC.
PATENT DEPARTMENT
5300 ALLEN K BREED HIGHWAY
LAKELAND, FL 33811-1130

EXAMINER

BOES, TERENCE

ART UNIT	PAPER NUMBER
----------	--------------

3682

DATE MAILED: 04/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/648,305

Applicant(s)

JUNKER ET AL.

Examiner

Terence Boes

Art Unit

3682

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 23 March 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,6,7,12 and 15-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,6,7,12 and 15-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 August 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1,6,7,17,15-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The recitation in claim 1 "...wherein the circumferential groove extends into the torsion bar more deeply in a radial direction than the adjacent gear..." is indefinite. Relative to what part of the gear does the groove extend more deeply? Does the groove extend more deeply than the crest of the gear, the trough of the gear, the entire gear, the gear teeth, or some other part of the gear.

Claims 1,6,7,17,15-17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The recitation in claim 1 "...a side boundary surface adjacent to and radially deeper than the gear..." is indefinite. Relative to what part of the gear does the side boundary layer extend more deeply? Does the side boundary layer extend more deeply than the crest of the gear, the trough of the gear, the entire gear, the gear teeth, or some other part of the gear.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

Art Unit: 3682

1. Claims 1,6,7,12, and 15-17 are rejected under 35 U.S.C. 102(e) as being anticipated by Bell et al USP 6,609,672. Bell discloses a similar device in Fig 3, the device comprising a(n):

- torsion bar (20)
- gear (32) integral therewith, the gear is arranged at the end of the torsion bar (see figure 2)
- flange (14) integral with the torsion bar with a circumferential groove (Fig 2) in the bar being adjacent to and disposed between the flange and the gear, wherein the circumferential groove extends into the torsion bar more deeply in a radial direction than the adjacent gear, the circumferential groove having a side boundary surface on the flange and a side boundary surface adjacent to and radially deeper than the gear.
- second gear (30) integral with the torsion bar located at another end of the torsion bar

3. Regarding the molding process, claims 6,7, and 17, product by process claims are not limited to the manipulations of the recited steps, only the structure implied by the steps (see MPEP 2113).

Response to Arguments

4. Applicant's arguments filed 3/23/06 have been fully considered but they are not persuasive. The applicant argues: "Claim 1 as amended recites the circumferential groove (5) extends into the bar material more deeply in a radial direction than the gear. Furthermore, this is as is shown in each of figures 1,4, and 5-10. More particularly, the

tool 10 in figure 9 shows the projection 12 which forms the groove 5 on the gear 2 clearly extending much deeper radially inwardly than the gear teeth to form a circumferential groove having a side boundary surface on the flange and a side boundary surface adjacent to and radially deeper than the gear. Bell et al. show in figure 2 a torsion bar wherein the gear teeth project outward from the torsion bar and the space between the flange 35 and the gear is not shown deeper than the gear teeth. As a result the alleged groove, if such a space could be considered a groove, does not have a side boundary surface adjacent to or radially deeper than the gear.” Bell Figure 2, and Applicant's Figure 6 have been included below for convenience.

In response, Merriam Webster OnLine defines a groove to be: a long narrow channel or depression. The applicant argues “...if such a space could be considered a groove...” thus affirming the disclosure of “a space”. The examiner considers the lowermost portion of this affirmed space to be bordered by a groove.

Bell et al. figure 2 clearly shows a long narrow circumferential channel between flange (35) and the gear teeth (32) shown in cross section. This groove, as shown in Figure 2, extends into the torsion bar more deeply in a radial direction than the adjacent gear crest. Furthermore, the circumferential groove has a side boundary surface on the flange and a side boundary surface adjacent to and radially deeper than the gear (as best understood) as can be seen in figure 2.

Because the groove between the flange (35) and the gear teeth (32) is defined by; a sidewall comprised of the flange (35) itself, a lower portion comprised of the torsion bar itself, and a radially higher adjacent sidewall comprised of a radially lower

portion of the gear (as best understood), the groove is considered by the examiner to extend into the torsion bar more deeply in a radial direction than the adjacent gear (as best understood) and has a side boundary surface on the flange and a side boundary surface adjacent to and radially deeper than the gear (as best understood).

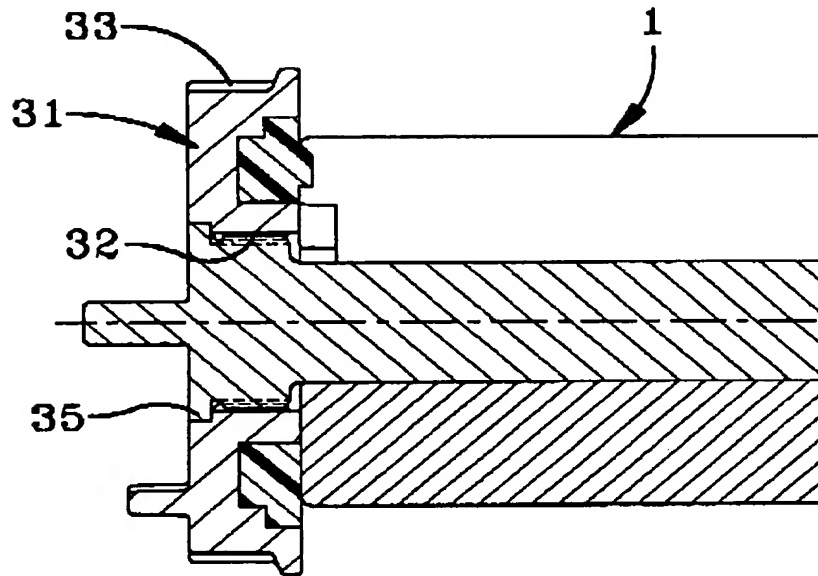
5. The applicant further argues: the space between the flange 35 and the gear is not shown deeper than the gear teeth.

In response, the groove, having a side wall comprised of a radially lower portion of the gear, is clearly shown deeper than the radially higher crests of the gear teeth and therefore is also considered by the examiner to be radially deeper than the gear (as best understood).

6. In response to applicant's arguments that the references fail to show certain features of applicant's invention, it is noted that the features upon which applicant relies (i.e., gear teeth, trough) are not recited in the rejected claim(s). Although the claims are interpreted in light of the specification, limitations from the specification are not read into the claims. See *In re Van Geuns*, 988 F.2d 1181, 26 USPQ2d 1057 (Fed. Cir. 1993).

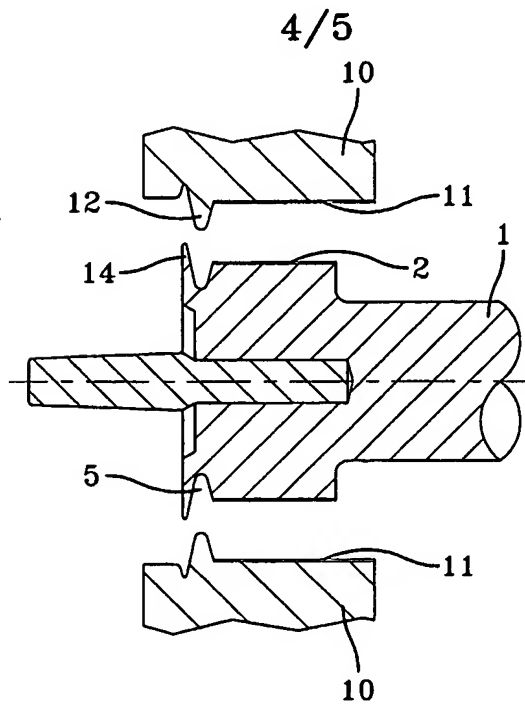
7. The applicant argues "that the functional method of forming the torsion bar should be allowed patentable weight as products produced by a process can be considered for patentability".

In response, the examiner has considered the product by process for patentability, however, the examiner has given the product by process claim limitations no patentable weight as product by process claims are not limited to the manipulations of the recited steps, only the structure implied by the steps (see MPEP 2113).



Bell et al. Figure 2

FIG-2



Applicant's Figure 9

FIG-9

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Terence Boes whose telephone number is (571) 272-4898. The examiner can normally be reached on Monday - Friday 9:00 AM - 4:00 PM.

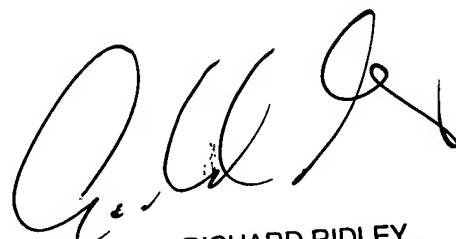
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Richard Ridley can be reached on (571) 272-6917. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only.

Art Unit: 3682

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

TB
4/6/06

A handwritten signature in black ink, appearing to read 'R. Ridley', is positioned above the printed name and title.

RICHARD RIDLEY
SUPERVISORY PATENT EXAMINER